



ORDER/NERC/205B/2020

**BEFORE THE NIGERIAN ELECTRICITY REGULATORY COMMISSION
IN THE MATTER OF THE EXTRAORDINARY REVIEW OF MULTI YEAR TARIFF ORDER 2015
FOR KADUNA ELECTRICITY DISTRIBUTION PLC**

TITLE

1. This regulatory instrument may be cited as the **REVISED MULTI YEAR TARIFF ORDER (MYTO) 2020 for Kaduna Electricity Distribution Plc.**

COMMENCEMENT

2. This Order shall take effect from 1st November 2020 and shall cease to have effect on the issuance of a new Minor Review Order or an Extraordinary Tariff Review Order by the Nigerian Electricity Regulatory Commission ("NERC" or the "Commission").

CONTEXT

3. The Commission has reviewed an extra-ordinary tariff review application filed by Kaduna Electricity Distribution Plc ("KAEDCO") seeking approval to review its end-user tariffs in consideration of the impact of inflation, foreign exchange and implementation of its investment plan towards improving service to customers.
4. The Commission, pursuant to sections 32 and 76 of the Electric Power Sector Reform Act ("EPSRA"), issued the MYTO – 2015 Tariff Order in December 2015 to address, amongst other objectives, the provision of cost-reflective tariffs thus ensuring that prices charged by licensees are fair to consumers and are sufficient to allow licensees that operate efficiently to recover the full cost of their activities, including a reasonable return on the capital invested in the business.
5. Section 6 of the MYTO Methodology (Amended) provides for the biannual minor review of tariffs taking into consideration changes in exogenous variables outside the control of operators in the Nigerian Electricity Supply Industry ("NESI"). These variables are the Nigerian and United States inflation rates, NGN/USD foreign exchange rates, gas prices and available generation capacity.
6. Section 9(c) of the "Regulations on Procedure for Electricity Tariff Reviews in the Nigerian Electricity Supply Industry" provides the basis upon which the Commission may accept applications for the conduct of extraordinary tariff reviews.

7. The Commission reviewed the application filed by KAEDCO taking into consideration the outcome of public consultations held in February - March 2020 and approved end-user tariffs for the period 1st September 2020 to 30th June 2025.
8. Subsequent to the review of the KAEDCO's application and the outcome of the public consultation, the Commission had vide Order NERC/205/2020, approved end-user tariffs that reflect the impact of changes in macroeconomic parameters on KAEDCO's revenue requirement and a revised tariff design that aligns rates paid by customers with the quality of service as measured by average availability of power supply over a one-month period. The Order takes cognisance of the varying levels of infrastructural development in the utility's network that is directly attributable to the level of investment which results in customers enjoying different levels of supply in the same network. The Order further seeks to incentivise utilities to invest across their entire networks thus migrating more customers to higher quality of service and ensuring that the rates paid by customers is aligned with service improvements.
9. The Commission further directed KAEDCO to pursue continuous engagement with its customers through all mediums of public consultations on the committed levels of quality of electricity supply on the basis of monthly average hours of supply per day.
10. Pursuant to the objective of incentivising a continuous improvement of service for all customers, the Order further provides that –
 - a. **there shall be no tariff reviews for customers experiencing an average power supply availability of less than an average of 12-hours per day over a period of one month.**
 - b. unmetered customers within service bands A, B and C thus benefitting from a supply availability in excess of an average of 12hrs per day over a period of one month as affected by the Tariff Order shall be protected by the provisions of the "Order on Capping of Estimated Bills in NESI" and the FGN intervention on accelerated metering of all customers.
 - c. KAEDCO shall continue to maintain the lifeline tariff of NGN4.00/kWhr for all customers consuming less than 50kWhrs of energy per month as a safeguard for the less privileged members of the society.
11. Following complaints by various consumer/trade associations, civil society groups and labour unions to the Federal Government on the implementation of MYTO-2020, joint consultative meetings were held between the Federal Government of Nigeria ("FGN"), labour unions and other stakeholders to review their submissions on the implementation of rates in the MYTO-2020 Tariff Order.
12. The team representing FGN agreed to a 14-day freeze on the tariffs payable by end-use customers to allow for further consultation with the labour union. This was communicated vide a communique jointly signed by both the representatives of the government and the labour union.



13. Section 33 of EPSRA provides that *"the Minister may issue general policy directions to the Commission on matters concerning electricity, including directions on overall system planning and coordination, which the Commission shall take into consideration in discharging its functions under section 32(2), provided that such directions are not on conflict with this Act or the Constitution of the Federal Republic of Nigeria"*.
14. The Secretary to the Government of the Federation, Minister of Power and other Ministers were part of the FGN team that issued the communique. The Commission duly accept the decision as a general policy direction in accordance with section 33 of EPSRA.
15. Section 22 of the Business Rules of the Commission Regulations 2006 (the "Business Rules") provides that *"the Commission may on its own or on the application of any of the persons or parties concerned, within sixty (60) days of the making of any Decision, direction or Order, reconsider, vary or review such Decision, directions or Orders and make such appropriate Orders as the Commission deems fit"*.
16. The Commission having accepted the policy direction suspended the MULTI YEAR TARIFF ORDER 2020 for KAEDCO by Order No. NERC/209/2020 dated 28th September 2020. The suspension was for a period of 14-days with effect from 28th September 2020.
17. Subsequent to the conclusion of consultations with the labour unions, the Commission received a policy direction on end-user tariffs intervention from the Minister of Power on 15th October 2020 in accordance with section 33 of EPSRA. The policy direction proposed the reliefs below in tariff setting in NESI for the fourth quarter of 2020 –
 - a. Band A: 10% reduction in the marginal increase experienced due to transition to service-based tariff ("SBT")
 - b. Band B: 10.5% reduction in the marginal increase experienced due to transition to SBT.
 - c. Band C: 31% reduction in the marginal increase experienced due to the transition to SBT.
 - d. Band D: No change.
 - e. Band E: No change.
18. The Commission **HEREBY REVOKES** the NERC Order on Suspension of the Multi Year Tariff Order (MYTO) 2020 for the Electricity Distribution Licensees and the Multi Year Tariff Order 2020 for KAEDCO.
19. The Commission **HEREBY APPROVES** the REVISED MULTI YEAR TARIFF ORDER (MYTO) 2020 for Kaduna Electricity Distribution Plc which addresses the adjustments to the tariffs payable by KAEDCO's customers in compliance with the policy direction on end-user tariff intervention and the minimum remittance thresholds in accordance with FGN tariffs policy support.



OBJECTIVES

20. This Order seeks to:

- a. Ensure that prices charged by KAEDCO are fair to customers and are sufficient to allow KAEDCO to fully recover the efficient cost of operation, including a reasonable return on the capital invested in the business pursuant to the provisions of sections 32(d) and 76(2)(a) of EPSRA.
- b. Provide a path to a transition to fully service-based cost-reflective tariffs by July 2021.
- c. Reclassify and disaggregate customers and customer clusters on the basis of KAEDCO's commitment on quality of service to customer clusters.
- d. Ensure that customer tariffs are commensurate and aligned with the quality and availability of power supply committed to customer clusters by KAEDCO.
- e. Ensure sustained improvement in reliability and quality of supply by incentivising KAEDCO to off-take energy in accordance with its Vesting Contract and MYTO load allocation.
- f. Provide a framework for settlement of imbalances between Transmission Company of Nigeria Plc ("TCN") and KAEDCO on delivery and offtake of available energy in accordance with the Market Rules, vesting contracts and other industry documents.
- g. Provide a framework that ensures customer tariffs are consistent with the services they receive from KAEDCO.
- h. Develop and implement a framework for enforcing market discipline in respect of market remittances and managing future revenue shortfalls in the industry including a minimum market remittance requirement to account for differences between cost-reflective tariffs and allowed tariffs in the settlement of invoices issued by the Nigerian Bulk Electricity Trading Plc ("NBET") and the Market Operator ("MO").
- i. Support the interim arrangements for payments to the electricity market and reaffirm the payment securitisation requirement and flow of funds from KAEDCO to NBET and MO.

BASIS FOR THE REVIEW

21. Change in Rate Design

Pursuant to the outcome of the public hearings held in February/March 2020 on the extraordinary tariff application filed by KAEDCO, the Commission directed the utility to adopt a revised rate design that aligns tariffs with service level experience of customers in different clusters/locations. Upon evaluation of KAEDCO's application, the Commission considered and approved five (5) tariff 'Service Bands' representing relative quality of service experience as measured by the committed minimum average hours of supply per day over a period of one month, interruptions (frequency and duration), service voltage levels and a number of other service parameters. These service bands are further subdivided into tariff classes as follows:



- (i) Non-Maximum Demand (Non-MD).
- (ii) Low voltage Maximum Demand (MD 1).
- (iii) Medium/High voltage Maximum Demand (MD 2).
- (iv) Lifeline tariff class (R1) (for consumption of not more than 50kWh/month).

Table – 1 below is a comparative analysis of the new and old tariff classes:

Table – 1: KAEDCO Tariff Classification

Service Bands	New Tariff Class	Old Tariff Class
Lifeline	R1	R1
A (minimum of 20hrs/day)	A – Non-MD	R2, C1, D1, A1 (single and three phase)
	A – MD 1	R3, C2, D2, A2 Street Light
	A – MD 2	R4, C3, D3, A3
B (minimum of 16hrs/day)	B – Non-MD	R2, C1, D1, A1 (single and three phase)
	B – MD 1	R3, C2, D2, A2 Street Light
	B – MD 2	R4, C3, D3, A3
C (minimum of 12hrs/day)	C – Non-MD	R2, C1, D1, A1 (single and three phase)
	C – MD 1	R3, C2, D2, A2 Street Light
	C – MD 2	R4, C3, D3, A3
D (minimum of 8hrs/day)	D – Non-MD	R2, C1, D1, A1 (single and three phase)
	D – MD 1	R3, C2, D2, A2 Street Light
	D – MD 2	R4, C3, D3, A3
E (minimum of 4hrs/day)	E – Non-MD	R2, C1, D1, A1 (single and three phase)
	E – MD 1	R3, C2, D2, A2 Street Light
	E – MD 2	R4, C3, D3, A3

KAEDCO shall be liable for service improvements in accordance with commitments under its universal service obligations for providing electricity supply to customers. Attached herewith as Appendix 2 are details of the service improvement commitments made by KAEDCO to customers in various tariff bands for the period 1st September 2020 to 31st December 2021.

22. Capital Expenditure (“CAPEX”) Plan

KAEDCO has applied to the Commission for an upward review of the CAPEX provisions in its tariffs to support the implementation of its Performance Improvement Plans (“PIP”) over the next 5 years. Pursuant to the request, the Commission has shared a CAPEX Request Template with KAEDCO as a guide for a revised submission to qualify for consideration in the tariffs. Accordingly, the rates as contained in this Order and valid to December 31, 2020 are based on current CAPEX provision as contained in MYTO-2015 Order, with necessary adjustments for changes in relevant macroeconomic indices. Any verified and approved investments beyond the CAPEX allowances during this period shall be recognised and applied in the Tariff Order commencing on 1st January 2021. CAPEX review proposals for the period 2021 – 2025 shall be evaluated and upon approval applied in the Tariff Order commencing on 1st January 2021.

23. MYTO Load Allocation

The current MYTO load allocation to DisCos was presented as a subject matter for consultation during the public hearings in consideration of the applications for extraordinary tariff review. Several DisCos and TCN consider the current MYTO Load Allocation as sub-optimal, given the changes that have occurred in load growth and capacities of the transmission and distribution networks. However, a full justification for a holistic review of the MYTO load allocation could not be established during this Extra-Ordinary Tariff Review process. Accordingly, the Commission orders that the current MYTO load allocation shall be maintained for the purpose of computing the relevant tariffs of all DisCos.

24. Tariff Assumptions

Pursuant to the provisions of the MYTO Methodology and the Regulation on Procedure for Electricity Tariff Review in NESI, Table 2 below provides the key indices considered in evaluating the tariff application by KAEDCO in this Extraordinary Tariff Review process. The projected parameters in this Order shall be reviewed and retrospectively adjusted during the December 2020 Minor Review of Tariffs to align the assumptions with actuals.

- a. **Nigerian rate of inflation:** The Nigerian rate of inflation for July 2020 as obtained from the National Bureau of Statistics (NBS) was 12.82%. This rate was adopted to project Nigerian inflation rates for year 2020 and beyond.
- b. **Exchange Rate:** In accordance with the provisions of the MYTO Methodology, CBN official exchange rates were used in this review. The MYTO - Methodology provides for a premium of 1% above the CBN rate as transaction cost and this was applied in the current review. The applicable NGN/USD exchange rate for the period September 1, 2020 and beyond is computed as NGN380 +1% premium = NGN383.80.
- c. **US rate of inflation:** Based on the data obtained from the website of the United States Bureau of Labor Statistics (<http://www.bls.gov>), the US inflation rate for the month of July 2020 was 1.0%. This rate was adopted for the purpose of this review to project US Inflation rates for year 2020 and beyond.



- d. Gas Price: The price of natural gas for the power sector has been regulated since the inception of MYTO in 2008. The Commission has maintained the gas price of US\$2.50/MMBTU and gas transportation cost of US\$0.80/MMBTU for this review. Other grid connected generation companies with contracted gas prices outside the regulated rates and as provided in their respective Gas Sale Agreements ("GSAs") are also provided for in the MYTO model as a pass-through cost.

Table – 2: Key Indices Considered in Evaluating KAEDCO Application

Parameter	Sep – Dec 2020	Jan – Jun 2021	Jul – Dec 2021	Jan – Dec 2022
Nigerian Inflation	12.82%	12.82%	12.82%	12.82%
Exchange Rate (₦/US\$)	383.8	383.8	383.8	383.8
US Inflation	1.00%	1.00%	1.00%	1.00%
Sent out Generation (MWh/h)	4,646	4,974	4,974	5,325
Weighted Generation Price (₦/kWh)	25.6	25.6	25.6	25.6
TCN and Admin Charge (₦/kWh)	7.8	8.3	8.3	8.2
Delivered to KAEDCO (MWh/h)	320	344	344	370
ATC&C Losses	20.12%	12.47%	12.47%	7.73%
End-use Cost-reflective Tariffs (₦/kWh)	57.22	53.99	53.99	51.13
End-use Allowed Tariffs (₦/kWh)	44.59	50.05	53.99	51.13
Tariff Shortfall (₦/kWh)	12.64	3.94	-	-



25. Approved End-user Tariffs Effective from 1st November 2020

Pursuant to KAEDCO's application for extraordinary tariff review and consistent with paragraph 21 of this Order, the Commission considered and approved the tariffs in Table-3A below with effect from 1st November 2020 and shall remain in force until the issuance of a new Minor Review Order or an Extraordinary Tariff Review Order by the Commission.

Table – 3A: Approved End-user Tariffs (R/kWh) for KAEDCO

Tariff Class	Nov – Dec 2020	Jan – Jun 2021	Jul – Dec 2021	Jan – Dec 2022	Jan – Dec 2023	Jan – Dec 2024	Jan – Dec 2025
Life-line (R1)	4.00	4.00	4.00	4.00	4.00	4.00	4.00
A - Non MD	53.71	56.31	62.53	59.22	59.10	57.75	56.74
A - MD1	58.41	61.54	67.52	63.94	63.82	62.35	61.26
A - MD2	62.80	66.42	70.30	66.58	66.45	64.92	63.79
B - Non MD	51.61	54.11	55.16	52.24	52.14	50.94	50.06
B - MD1	55.92	58.92	61.84	58.56	58.45	57.11	56.11
B - MD2	58.21	61.48	64.65	61.22	61.10	59.70	58.66
C - Non MD	43.96	50.10	51.39	48.67	48.58	47.46	46.64
C - MD1	44.74	51.25	58.44	55.35	55.24	53.97	53.03
C - MD2	46.51	53.81	61.36	58.11	58.00	56.67	55.68
D - Non MD	38.47	38.47	43.44	41.14	41.06	40.12	39.42
D - MD1	42.90	42.90	48.93	46.34	46.25	45.19	44.40
D - MD2	45.28	45.28	51.64	48.91	48.81	47.69	46.86
E - Non MD	33.80	33.80	38.17	36.15	36.08	35.25	34.64
E - MD1	42.90	42.90	48.93	46.34	46.25	45.19	44.40
E - MD2	45.28	45.28	51.64	48.91	48.81	47.69	46.86

26. Tariff Freeze for Customers in Bands D and E

Following consultations and directions on tariff policy, the Commission hereby approves a deferment of the applicable tariffs for customers in service bands D and E (that is customers with a service commitment of less than an average of 12-hours of supply per day over a period of one month for the period 1st September 2020 to 1st January 2021). Accordingly, KAEDCO shall continue to charge customers in Bands D & E the tariffs applied prior to this Order as provided in Table – 3B below and shall only be allowed to charge the approved tariffs in this Order upon investments that improve quality of service experience thus migrating customers to higher service bands or another Order of the Commission.

Table – 3B: Applicable Tariffs for Customers in Bands D and E

Old Tariff Class	R1	R2-SP	R2-TP	R3	R4	C1	C2	C3	D1	D2	D3	A1	A2	A3	L1
Rate (N/kWh)	4.00	26.37	28.05	42.74	45.76	31.20	37.88	44.22	36.95	39.13	44.22	33.17	38.56	39.13	30.30
New Category	Life-Line	Non-MD	Non-MD	MD-1	MD-2	Non-MD	MD-1	MD-2	Non-MD	MD-1	MD-2	Non-MD	MD-1	MD-2	MD-1

27. Service Band Adjustment

Where there is a failure to deliver on committed service level by KAEDCO over as evaluated over a period of 60 days, rates payable by all customers in the affected load cluster shall be retroactively adjusted in line with the quality of service delivered over the same period, upon verification by the Commission.

28. Minimum Remittance Threshold for November – December 2020:

The Power Sector Recovery Plan (“PSRP”) provides for a gradual transition to cost-reflective tariffs with safeguards for the less privileged in the society. The Federal Government, under the PSRP Financing Plan, has committed to fund the revenue gap arising from the difference between cost reflective tariffs determined by the Commission and the actual end-user tariffs during the transition to cost-reflective tariffs. The waterfall of market revenues during the transitional period shall be -

- a. All DisCos are obligated to settle their market invoices in full as adjusted and netted off by applicable tariff shortfall approved by the Commission.
- b. In the determination of compliance with the minimum remittance threshold in this Order, the Commission shall consider verified receivables from MDAs for the settlement period and DisCo’s historical collection efficiency for MDAs.
- c. All FGN intervention from the financing plan of the PSRP for funding tariff shortfall shall be applied through NBET and MO to ensure 100% settlement of market invoices as issued by Market Participants.

- d. Under this framework, the minimum market remittance threshold for KAEDCO is determined after deducting the revenue deficit arising from tariff shortfall from the aggregate NBET and MO market invoices. KAEDCO shall be availed the opportunity to earn its revenue requirement only upon fully meeting the following payment obligations:
- i. Repayment of CBN-NEMS facility.
 - ii. 100% settlement of MO's invoice.
 - iii. Full settlement of 60.61% of NBET's monthly invoices being the minimum remittance threshold prescribed in this Order.
- e. KAEDCO shall be liable to relevant penalties/sanctions for failure to meet the minimum remittance requirement in any payment cycle in accordance with the terms of its respective contracts with NBET, MO and the provisions of the Market Rules and Supplementary TEM Order.
- f. KAEDCO shall maintain an adequate and unencumbered letter of credit covering three (3) months of the minimum payment obligations to NBET and MO in accordance with the provisions of the Market Rules and Market Participation Agreement.
- g. Where KAEDCO is unable to comply with its minimum remittance threshold to the market prescribed in this Order from its operations as a utility, the company may seek external financing under the CBN intervention to cover the payment deficit but subject to the following conditions:
- (i) A submission to the Commission providing details of the market remittance ramp up period, lenders term sheet, draw down period, moratorium (where applicable) and the repayment period of the loan.
 - (ii) The terms and conditions for the financing of the remittance shortfall shall be mutually agreed between KAEDCO and the lenders and filed with the Commission.
 - (iii) The submission to the Commission, no later than two (2) weeks from the effective date of this Order, of the utility's financial model covering the remittance ramp up period and projections for the repayment of the external financing.

CAPACITY PAYMENT

29. The average tariff for KAEDCO was determined considering the projected energy offtake of the company based on its percentage load allocation in the Vesting Contract. NBET shall continue to invoice KAEDCO for capacity charge and energy based on its load allocation and metered energy respectively in accordance with the December 2019 Minor Review of MYTO-2015 and Minimum Remittance Order for Year-2020.
30. Where it is established that TCN is unable to deliver KAEDCO's load allocation, TCN shall be liable to pay for the associated capacity charge. Where KAEDCO fails to take its entire load allocation due to constraints in its own network, KAEDCO shall be liable to pay the capacity charge as allocated in its Vesting contract. Table 4 provides the minimum market remittance threshold for KAEDCO, with an effective date of 1st November 2020:



Table – 4: Minimum Remittance Threshold for November – December 2020

KAEDCO's Minimum Remittance Table - November 2020 - December 2020			
Head	Subhead	₦,000,000	Remarks
Revenue Required	NEMSF	504	CBN - Loan
	NBET Invoice	11,976	Projected Generation cost
	MO Invoice	3,632	Projected TCN and Admin Services cost
	KAEDCO	5,249	Approved recovery of capital and operating expenses
	Total	21,361	Total Revenue Required
Allowed	Recovery	16,644	78% Being Amount recoverable through allowed end-user tariffs of Kaduna Electric in 2020
Tariff	Shortfall	4,717	22% Being the difference between Kaduna Electric's revenue requirement and its allowed recovery
Minimum Remittance Obligation	NEMSF	504	1st - Line Charge on Collection as per loan Agreement
	NBET Minimum Remittance	7,259	Being Minimum Remittance Obligation of 60.61% of NBET's Monthly Invoices for November to December 2020. Full settlement to be supplemented by the FGN intervention funds.
	MO Minimum Remittance	3,632	Being Minimum Remittance Obligation of 100% of MO's monthly Invoices of November to December 2020.
	KAEDCO	5,249	Being opportunity availed the DisCo to earn its revenue requirement based on its efficient operations and upon full settlement of the minimum remittances to NEMSF, NBET and MO.
	Total Distribution	16,644	

EFFECTIVE DATE

31. This Order shall be effective from 1st November 2020.

Dated this 30th day of October 2020

James A. Momoh
Chairman

Dafe C. Akpeneye
Commissioner

Appendix – 1: KAEDCO's Customer Classifications

Service Bands	New Tariff Class	Description
Lifeline	R1	Life-Line customers with energy consumption of not more than 50kWh/month
A (minimum of 20hrs/day)	A – Non-MD	Customers with single or three phase connection located within Band – A Service Level Feeders
	A – MD 1	Customers with LV Maximum Demand connection located within Band – A Service Level Feeders
	A – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within Band – A Service Level Feeders
B (minimum of 16hrs/day)	B – Non-MD	Customers with single or three phase connection located within Band – B Service Level Feeders
	B – MD 1	Customers with LV Maximum Demand connection located within Band – B Service Level Feeders
	B – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within Band – B Service Level Feeders
C (minimum of 12hrs/day)	C – Non-MD	Customers with single or three phase connection located within Band – C Service Level Feeders
	C – MD 1	Customers with LV Maximum Demand connection located within Band – C Service Level Feeders
	C – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within Band – C Service Level Feeders
D (minimum of 8hrs/day)	D – Non-MD	Customers with single or three phase connection located within Band – D Service Level Feeders
	D – MD 1	Customers with LV Maximum Demand connection located within Band – D Service Level Feeders
	D – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within Band – D Service Level Feeders
E (minimum of 4hrs/day)	E – Non-MD	Customers with single or three phase connection located within Band – E Service Level Feeders
	E – MD 1	Customers with LV Maximum Demand connection located within Band – E Service Level Feeders
	E – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within Band – E Service Level Feeders

Appendix – 2: KAEDCO's Service Level Commitments

		Service Level Proposal for Period-1: Sep - Dec 2020						Service Level Proposal for Period-2: Jan - Jun 2021					
Band	Feeder Name	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to calls (minutes)	Average Response time to resolving complaints (Hours)	Service Voltage Level (kV)	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to calls (minutes)	Average Response time to resolving complaints (Hours)	Service Voltage Level (kV)
A	11KV KAKURI	20	0.87	2.73	4	15	10.4	21	0.70	2.18	2	10	10.61
A	11KV BARNAWA MKR	20	0.86	2.90	4	15	8.4	21	0.68	2.32	2	10	9.61
A	11KV NASSARAWA MKR	20	1.32	2.42	4	15	8.4	21	1.05	1.94	2	10	9.62
A	11KV NORTEX	20	0.69	1.73	4	30	10.4	21	0.55	1.39	2	20	10.61
A	33KV AREWA	20	1.03	6.28	4	10	9.5	21	0.83	5.02	2	10	10.40
A	11KV UNGUWAN YEIWA	20	1.15	1.73	4	15	10.1	21	0.92	1.39	2	10	10.30
A	11KV FEDERAL HOUSING	20	0.86	2.90	4	15	9.6	21	0.68	2.32	2	10	10.40
A	11KV GWARI AVENUE	20	0.28	1.00	4	15	9.9	21	0.22	0.80	2	10	10.50
A	11KV SUNGLASS	20	0.46	0.88	4	15	9.6	21	0.37	0.70	2	10	10.30
A	11KV AREWA BOTTLERS	20	0.92	4.16	4	15	9.6	21	0.73	3.33	2	10	10.30
A	33KV PAN	21	0.99	3.14	4	15	32	22	0.80	2.51	2	10	32.64
A	33KV UNTL (DEDICATED)	21	0.90	4.80	4	15	32	22	0.72	3.84	2	10	32.64
A	33KV OLAM	21	0.45	4.80	4	15	31	22	0.36	3.84	2	10	31.62
A	11KV VILLAGE	20	1.87	2.48	4	15	9.5	21	1.49	1.98	2	10	10.10
A	11KV HIGH COST	20	0.75	1.32	4	15	9.5	21	0.60	1.05	2	10	10.10
A	33KV NARAYI VILLAGE	21	1.10	6.59	4	15	31	22	0.88	5.27	2	10	31.62
A	11KV PAMA	20	1.03	2.35	4	15	9	21	0.82	1.88	2	10	10.10
A	33KV UNGUWAN BORO	21	1.06	4.51	4	15	31	22	0.85	3.61	2	10	31.62
A	11KV GOVERNMENT HOUSE KD	20	0.55	3.71	4	15	10.1	21	0.44	2.96	2	10	10.30
A	11KV POLY ROAD	20	0.12	0.95	4	15	10.2	21	0.10	0.76	2	10	10.40
A	11KV LEVENTIS	20	0.97	5.94	4	15	10.2	21	0.77	4.75	2	10	10.40
A	33KV MOGADISHU	21	0.61	1.79	4	15	31	22	0.49	1.44	2	10	31.62

A	11KV WATER RESOURCES RIG	20	0.65	5.94	4	15	10.8	21	0.52	4.75	2	10	11.00
A	11KV YANTUKWANE	20	1.01	2.92	4	15	10.5	21	0.81	2.33	2	10	10.71
A	33KV KINKINAU	21	0.85	4.41	4	15	31	22	0.68	3.53	2	10	31.62
A	33KV AIRPORT ROAD	21	0.59	1.14	4	35	32	22	0.48	0.91	2	28	32.64
A	33KV RIGASA	20	1.21	5.37	4	15	31	21	0.97	4.30	2	10	31.62
A	11KV DANKANDE	20	0.85	3.59	4	15	8.6	21	0.68	2.87	2	10	10.10
A	11KV MC (DEDICATED)	20	0.99	1.13	4	15	8.9	21	0.79	0.90	2	10	10.10
A	11KV NTA DKA	20	1.03	1.41	4	15	8.9	21	0.82	1.13	2	10	10.10
A	11KV NABASE	20	0.48	1.29	4	15	9	21	0.38	1.04	2	10	10.10
A	11KV ZARIA ROAD	20	0.67	4.39	4	15	8.9	21	0.54	3.51	2	10	10.10
A	11KV STATEHOUSE	20	0.85	4.41	4	30	8.9	21	0.68	3.53	2	20	10.10
A	33KV NAF	21	1.29	8.38	4	15	32	22	1.03	6.70	2	10	32.64
A	11KV LEGISLATIVE QUARTERS	20	0.87	1.38	4	15	9.1	21	0.70	1.11	2	10	10.30
A	11KV ISA KAITA	20	0.55	2.26	4	15	9	21	0.44	1.81	2	10	10.30
A	11KV AHMADU BELLO WAY	20	0.41	1.79	4	15	10.1	21	0.33	1.43	2	10	10.30
A	11KV NDA	20	0.86	2.50	4	35	9	21	0.69	2.00	2	28	10.30
A	33KV ABAKPA	21	0.57	2.52	4	15	32	22	0.46	2.01	2	10	32.64
A	33KV JALI	20	0.86	2.50	4	15	32	21	0.69	2.00	2	10	32.64
A	11KV NACB	20	0.73	0.96	4	15	8.7	21	0.58	0.77	2	10	9.60
A	11KV UNGUWAN RIMI	20	1.40	4.46	4	15	8.7	21	1.12	3.57	2	10	9.60
A	11KV DAWAKI	20	0.86	1.20	4	15	8.6	21	0.69	0.96	2	10	9.60
A	11KV MALALI	20	1.01	5.04	4	30	8.6	21	0.81	4.03	2	20	9.60
A	33KV WATER WORKS	21	0.64	3.54	4	15	29	22	0.51	2.83	2	10	31.62
A	11KV TEACHING HOSPITAL DKA	20	0.79	2.99	4	15	9.7	21	0.63	2.39	2	10	10.10
A	11KV CONSTITUTION ROAD	20	1.32	2.34	4	15	9.6	21	1.06	1.87	2	10	10.10
A	11KV LUGGARD HALL	21	0.35	1.32	4	15	9.2	22	0.28	1.06	2	10	10.10
	33KV DOKA	22	3.76	6.17	4	15	31	23	3.01	4.94	2	10	31.62
A	11KV GRA ZAR	20	0.85	3.90	4	15	8.9	21	0.68	3.12	2	10	10.10
A	11KV CANTEEN	20	1.37	3.81	4	15	9	21	1.09	3.05	2	10	10.10
A	11KV SABON GARIN ZAR	20	0.57	2.52	4	30	8.9	21	0.46	2.01	2	20	10.10

A	33KV P2	21	0.47	7.79	4	15	27.4	22	0.38	6.23	2	10	29.00
A	11KV ABU	20	0.53	4.89	4	15	8.4	21	0.43	3.91	2	10	10.10
A	11KV NNPC ZAR	20	0.77	5.00	4	30	8.5	21	0.62	4.00	2	20	9.80
A	33KV HANWA	20	0.75	5.20	4	15	29	21	0.65	4.20	2	10	29.50
A	11KV SAMARU	20	1.24	5.71	4	15	8.2	21	0.99	4.57	2	10	9.80
A	33KV AVIATION	21	0.77	5.00	4	15	27.7	22	0.62	4.00	2	10	29.00
A	11KV GASKIYA	20	0.57	2.52	4	30	9.1	21	0.46	2.01	2	20	10.10
A	33KV KOFAN DOKA	20	1.20	8.31	4	35	28.2	21	0.96	6.65	2	28	29.00
A	33KV ZARIA WATER WORKS (DEDICATED)	20	0.57	0.08	4	15	28	21	0.46	0.06	2	10	29.00
A	33KV POWER HOUSE	21	0.49	8.22	4	15	27	22	0.40	6.57	2	10	29.00
A	33KV NNPC GUSAU	21	0.79	3.17	4	15	27	22	0.63	2.54	2	10	29.00
A	11KV KADUNA ROAD	20	0.86	1.78	4	15	8.9	21	0.69	1.42	2	10	10.10
A	11KV LODGE ROAD	20	0.54	0.46	4	15	8.9	21	0.43	0.37	2	10	10.10
A	33KV POWER STATION	20	1.02	10.50	4	15	30	21	0.82	8.40	2	10	30.60
A	11KV INDUSTRIAL SOK	20	0.76	0.51	4	25	9.6	21	0.61	0.41	2	20	10.20
A	33KV TOWNSHIP	21	1.03	8.52	4	15	27	22	0.83	6.82	2	10	29.00
A	11KV NTA SOK	20	0.85	3.40	4	25	10.1	21	0.68	2.72	2	20	10.30
A	33KV NEW INJECTION	21	0.86	9.93	4	15	28	22	0.69	7.95	2	10	29.00
A	33KV CCNN	21	0.09	1.16	4	15	28	22	0.07	0.93	2	10	29.00
A	33KV KWARE/UNIVERSITY	20	0.62	3.18	4	15	29	21	0.50	2.55	2	10	29.58
A	33KV YABO/SHAGARI	20	0.63	3.85	4	15	28	21	0.51	3.08	2	10	29.50
A	11KV GRA KBI	20	0.76	5.12	4	20	10.5	21	0.61	4.10	2	14	10.71
A	11KV BULASA	20	0.53	0.96	4	20	10.5	21	0.43	0.77	2	14	10.71
A	11KV GWADANGWALI	20	0.68	1.06	4	20	10.1	21	0.54	0.85	2	14	10.30
A	11KV GRA JEGA	20	0.76	3.41	4	15	9.8	21	0.61	2.73	2	0	10.00
A	33KV LABANA (DEDICATED)	21	0.37	2.22	4	20	31	22	0.30	1.78	2	14	31.62
A	33KV UNIVERSITY (DEDICATED)	21	1.14	2.98	4	20	31	22	0.91	2.38	2	14	31.62
A	11KV BANK KAFANCHAN	20	0.41	5.37	4	20	8.7	21	0.33	4.30	2	14	9.60
A	11KV KAFANCHAN (TOWNSHIP)	20	0.57	2.52	4	30	8.7	21	0.46	2.01	2	20	9.80
B	11KV CHELCO	16	0.66	2.42	4	15	9.9	17	0.53	1.94	2	10	10.10

B	11KV NOCACO	16	0.69	6.28	4	15	10.3	17	0.55	5.02	2	10	10.51
B	11KV MAHUTA	16	0.56	2.48	4	30	9	17	0.45	1.98	2	20	10.10
B	11KV MANDO ROAD	16	0.51	1.41	4	30	9.8	17	0.41	1.13	2	20	10.00
B	11KV NASFAT	16	0.65	5.94	4	30	8.9	17	0.52	4.75	2	20	10.10
B	11KV TEACHING HOSPITAL ZAR	16	0.75	1.85	4	30	9.1	17	0.60	1.48	2	20	10.10
B	11KV TUDUN WADA ZAM	16	0.86	1.78	4	15	8.9	17	0.69	1.42	2	10	10.10
B	11KV GADA BIYU	16	0.71	4.49	4	15	8.9	17	0.57	3.59	2	10	10.10
B	11KV GRA ZAM	16	0.83	3.39	4	15	9.1	17	0.67	2.71	2	10	10.20
B	11KV INDUSTRIAL ZAM	16	0.59	5.97	4	15	9.3	17	0.47	4.78	2	10	10.30
B	11KV DAMBA	16	0.86	1.78	4	15	9.2	17	0.69	1.42	2	10	10.20
B	11KV ZAMTEX	16	0.54	4.62	4	27	9.4	17	0.43	3.69	2	20	10.20
B	11KV FGGC	16	0.77	5.00	4	27	9.6	17	0.62	4.00	2	20	10.20
B	3KV MAFARA	17	1.45	2.00	4	35	27	18	1.16	1.60	2	28	29.00
B	11KV MABERA	16	1.02	6.49	4	15	9.2	17	0.81	5.19	2	10	10.30
B	11KV ARMY BARRACK	16	0.71	7.19	4	15	9.5	17	0.57	5.75	2	10	10.30
B	11KV TOWN	16	0.54	7.30	4	15	9.6	17	0.43	5.84	2	10	10.20
B	11KV ARKILLA	16	0.95	4.40	4	15	9.8	17	0.76	3.52	2	10	10.00
B	11KV BADO	16	0.93	1.16	4	25	9.3	17	0.74	0.93	2	20	10.30
B	11KV INDUSTRY	16	0.93	3.18	4	15	9.8	17	0.74	2.55	2	10	10.00
B	3KV FARFARU	22	1.03	8.59	4	15	29	23	0.83	6.87	2	10	30.00
B	11KV MASSARAWA KBI	16	0.76	5.12	4	30	9.9	17	0.61	4.10	2	20	10.10
B	11KV KARA	16	0.64	3.36	4	20	10.2	17	0.51	2.69	2	14	10.40
B	11KV GRA ARGUNGU	16	0.74	4.36	4	48	10.1	17	0.59	3.49	2	36	10.30
B	11KV KANTA	16	0.87	2.14	4	48	10.3	17	0.69	1.71	2	36	10.51
B	3KV ARGUNGU	17	1.44	4.04	4	48	30	18	1.15	3.23	2	36	30.60
B	11KV YELWA	16	0.39	3.10	4	20	9.6	17	0.31	2.48	2	14	10.50
B	11KV YAURI	16	1.06	0.96	4	20	9.6	17	0.85	0.77	2	14	10.30
B	3KV NASCO/YELWA	16	0.85	0.98	4	20	29	17	0.78	0.90	2	14	29.50
C	11KV KURMIN MASHI	15	1.06	6.77	4	35	9	16	0.84	5.42	2	28	10.20
C	11KV COSTAIN	13	0.81	5.04	4	35	9.7	14	0.65	4.03	2	28	10.30
C	11KV WUSASA	13	0.79	2.09	4	30	9.4	14	0.63	1.67	2	20	10.40

C	11KV ZARIA CITY	13	0.93	2.48	4	30	9.4	14	0.75	1.98	2	20	10.40
C	11KV KOFAN KIBO	13	0.35	3.97	4	30	8.8	14	0.28	3.18	2	20	10.30
C	11KV DAM	13	1.22	5.04	4	30	8.4	14	0.97	4.03	2	20	10.50
C	11KV SHIKA	13	0.77	5.00	4	30	8.2	14	0.62	4.00	2	20	9.80
C	11KV BARRACKS ZURU	13	0.83	5.37	4	30	7.4	14	0.66	4.30	2	20	9.50
C	11KV RIKOTO/ZURU	13	0.57	2.52	4	30	7.4	14	0.46	2.01	2	20	9.40
C	33KV ZURU	15	0.58	2.24	4	48	29	16	0.46	1.79	2	36	9.70
C	11KV MAKARFI ROAD	14	0.97	5.94	4	30	9.4	15	0.77	4.75	2	20	10.10
C	11KV SULTAN PALACE	15	0.76	3.41	4	25	9.8	16	0.61	2.73	2	20	10.00
C	11KV WATERWORKS SOK	13	1.24	3.18	4	30	9.6	14	0.99	2.55	2	20	10.10
C	33KV TAMBUNWAL	15	1.48	4.36	4	30	31	16	1.19	3.49	2	20	31.62
C	33KV GONIN GORA	15	0.55	3.71	4	35	32	16	0.44	2.96	2	28	32.64
C	11KV SABON TASHA	13	0.40	2.09	4	35	9	14	0.32	1.67	2	28	10.30
C	11KV UNGUWAN MUZU	12	0.41	1.41	4	35	9.9	13	0.33	1.13	2	28	10.10
C	11KV TUDUN WADA KBI	13	0.37	2.22	4	48	10.6	14	0.30	1.78	2	36	10.81
C	33KV JEGA	12	0.77	3.10	4	48	30	13	0.62	2.48	2	36	30.60
C	33KV KAMBA	12	1.06	2.56	4	20	29	13	0.85	2.05	2	14	29.58
C	33KV ALIERO	12	0.76	3.24	4	48	30	13	0.61	2.59	2	36	30.60
C	33KV GWANDU	12	1.70	4.59	4	48	29	13	1.36	3.67	2	36	29.58
C	33KV BUNZA	12	1.44	2.14	4	48	28	13	1.16	1.71	2	36	29.00
C	11KV KAGORO	12	0.35	3.97	4	48	8.2	13	0.28	3.18	2	36	9.90
C	11KV MANCHOK	12	0.38	6.17	4	48	8.3	13	0.30	4.94	2	36	9.80
D	11KV KAWO	11	1.03	1.41	4	35	8.9	12	0.82	1.13	2	28	9.60
D	11KV RAFIN GUZA	11	1.06	6.77	4	35	8.8	12	0.84	5.42	2	28	9.80
D	11KV KATABU	8	1.03	1.41	4	35	8.6	9	0.82	1.13	2	28	9.80
D	11KV JALI	8	0.65	5.94	4	35	9	9	0.52	4.75	2	28	9.90
D	11KV RABAH ROAD	9	0.86	2.50	4	30	9.2	10	0.69	2.00	2	20	9.90
D	11KV HAYIN RIGASA	9	1.03	1.41	4	30	9.4	10	0.82	1.13	2	20	10.10
D	11KV TUDUN WADA RIG	9	0.78	3.44	4	35	9.8	10	0.62	2.75	2	28	10.00
D	33KV JERE	11	0.55	0.98	4	45	30	12	0.44	0.79	2	28	30.60
D	33KV KAFANCHAN	11	2.25	5.82	4	48	33	12	1.80	4.65	2	36	33.00

D	11KV SABON GARIN ZAM	11	0.99	5.48	4	35	9.3	12	0.79	4.38	2	28	10.30
D	33KV KAURIAN NAMODA	11	1.39	5.75	4	35	27	12	1.11	4.60	2	28	29.10
D	33KV MARADUN	8	1.01	2.30	4	45	27	9	0.81	1.84	2	38	29.30
D	33KV ANKA	8	1.72	2.48	4	60	28	9	1.38	1.99	2	38	29.30
D	11KV DURBAWA	11	0.44	4.36	4	30	9.1	12	0.36	3.49	2	20	10.10
D	11KV KUEPPERS	11	0.86	1.78	4	30	9.3	12	0.69	1.42	2	20	10.10
D	11KV DIORI HAMMANI	11	0.54	4.62	4	30	9.3	12	0.43	3.69	2	20	10.20
D	11KV SARKIN FADA	11	0.46	1.16	4	30	8.9	12	0.37	0.93	2	20	10.00
D	11KV ILELEA ROAD	11	0.62	3.18	4	30	8.7	12	0.50	2.55	2	20	10.00
E	33KV TURUNKU	5	0.83	5.79	4	15	28	6	0.67	4.63	2	10	29.00
E	33KV SOBA	20	1.10	4.12	4	15	28	21	0.88	3.29	2	10	29.00
E	33KV KUDAN	5	0.78	6.17	4	35	27	6	0.63	4.94	2	28	29.00
E	11KV BIRNIN GWARI	12	1.03	1.41	4	35	10.2	13	0.82	1.13	2	28	10.40
E	33KV BIRNIN GWARI	12	1.18	6.58	4	45	28	13	0.95	5.26	2	38	29.00
E	33KV MAGAMI	12	0.44	1.86	4	35	27	13	0.35	1.49	2	28	29.00
E	33KV BAKURA	12	0.45	6.69	4	35	27	13	0.36	5.35	2	28	29.00
E	33KV TSAFE	17	1.41	3.40	4	35	27	18	1.13	2.72	2	28	29.00
E	11KV SABON GARIN RIG	16	0.40	2.09	4	30	9.4	17	0.32	1.67	2	20	10.20
E	11KV ASIKOLAYE	16	0.39	2.50	4	30	9.7	17	0.35	2.10	2	20	10.10
E	11KV WUSASA	13	0.79	2.09	4	30	9.4	14	0.63	1.67	2	20	10.40
E	11KV ZARIA CITY	13	0.93	2.48	4	30	9.4	14	0.75	1.98	2	20	10.40
E	11KV KOFAN KIBO	13	0.35	3.97	4	30	8.8	14	0.28	3.18	2	20	10.30
E	33KV MAKARFI	5	0.87	8.47	4	35	27	6	0.69	6.78	2	28	29.00
E	33KV NNPC SAMINAKA	5	0.88	3.27	4	35	27	6	0.70	2.62	2	28	29.00
E	33KV KOKO	5	1.16	9.61	4	48	29	6	0.93	7.69	2	36	29.00